

REMARKS

At the time of the Office Action dated April 7, 2004, claims 1-31 were pending and rejected in this application. Claim 7-8 and 22-23 have been cancelled, and claims 1-6, 9-14, 16-21, 24-29 and 31 have been amended. Applicants submit that the present Amendment does not generate any new matter issue.

With regard to the Examiner's statement in the first paragraph on page two of the Office Action, Applicants note that the Examiner has identified the correct spelling of the first named inventor to be Akio Kojima.

In response to the Examiner's objections to claims 6 and 14, Applicants note that claims 6 and 14 have been amended to address these objections.

CLAIMS 1 AND 16 ARE REJECTED UNDER 35 U.S.C. § 103 FOR OBVIOUSNESS BASED UPON SUZUKI ET AL., U.S. PATENT NO. 6,118,552 (HEREINAFTER SUZUKI), IN VIEW OF ISHIKAWA ET AL., U.S. PATENT NO. 5,926,292 (HEREINAFTER ISHIKAWA)

On page three of the Office Action, the Examiner concluded that one having ordinary skill in the art would have been motivated to modify Suzuki in view of Ishikawa to arrive at the claimed invention. This rejection is respectfully traversed.

Initially, Applicants note that each of independent claims 1, 16 and 31, as amended, recite S that the selection of the target color is "according to a comparison between the statistics," and the

target color is then used for dividing a small region into two sections. Also, the relationship between color components is reflected upon the extraction of the representative color, which is extracted from colors of respective pixels included in each section. As described in the present specification, if each color component is processed independently without reflecting the relationship between color components upon extracting, this processing often prompts the generation of errors in the restored image.

In Suzuki, an image signal is expressed by "L*a*b space," and this image signal is subjected to the region decision processing for "color," "monochrome," or "background" for each block. As shown in Fig. 3(b), a color region is replaced with white pixels and then the whole of the original is subjected to the adaptive bi-level encoding and the coding suitable for monochrome. The color components in the color region are coded separately in an appropriate manner to colors, and the original-containing color and monochrome images are coded properly.

Suzuki does not teach the claimed selecting limitation and the general method of extracting a representative color. The Examiner interpreted "L*" in Suzuki to correspond to the selected target color. However, Suzuki always selects "L*" and does not select any other component besides "L*." Thus, the claimed select processing is not needed (or described) by Suzuki.

Suzuki discloses that the statistic is calculated per color component. As shown in the equation (3) in column 8 of Suzuki, the constant in each component is compared with a

corresponding threshold value; however, such comparison results are not comparable to the comparison between the statistics recited in the claims.

Even if Ishikawa discloses the extracting of a representative color, both Suzuki and Ishikawa fail to disclose the claimed selective processing. Therefore, both the claimed relationship between the color components and the sequential extracting of the representative color are not simultaneously satisfied by the applied prior art. Applicants, therefore, respectfully solicit the withdrawal of the imposed rejection of claims 1 and 16 for obviousness based upon Suzuki in view of Ishikawa.

CLAIMS 2 AND 17 ARE REJECTED UNDER 35 U.S.C. § 103 FOR OBVIOUSNESS BASED UPON SUZUKI IN VIEW OF ISHIKAWA AND FURTHER IN VIEW OF ALLEBACH ET AL., U.S. PATENT NO. 5,544,284 (HEREINAFTER ALLEBACH)

On page four of the Office Action, the Examiner concluded that one having ordinary skill in the art would have been motivated to modify the combination of Suzuki and Ishikawa in view of Allebach to arrive at the claimed invention. This rejection is respectfully traversed.

Claims 2 and 17 respectively depend upon independent claims 1 and 16, and Applicants incorporate herein the arguments previously advanced in traversing the imposed rejection of claims 1 and 16 under 35 U.S.C. § 103 for obviousness based upon Suzuki in view of Ishikawa. Specifically, the combination of Suzuki in view of Ishikawa fails to teach or suggest the claimed relationship between the color components and the sequential extracting of the representative color. The tertiary reference to Allebach also does not disclose this concept. Accordingly, the

proposed combination of references would not yield the claimed invention. Applicants, therefore, respectfully submit that the imposed rejection of claims 2 and 17 under 35 U.S.C. § 103 for obviousness based upon Suzuki in view of Ishikawa and Allebach is not viable and, hence, solicit withdrawal thereof.

**CLAIMS 3 AND 18 ARE REJECTED UNDER 35 U.S.C. § 103 FOR OBVIOUSNESS BASED
UPON SUZUKI IN VIEW OF ISHIKAWA AND FURTHER IN VIEW OF MAKITA, U.S. PATENT NO.
6,269,186**

On page five of the Office Action, the Examiner concluded that one having ordinary skill in the art would have been motivated to modify the combination of Suzuki and Ishikawa in view of Makita to arrive at the claimed invention. This rejection is respectfully traversed.

Claims 3 and 18 respectively depend upon independent claims 1 and 16, and Applicants incorporate herein the arguments previously advanced in traversing the imposed rejection of claims 1 and 16 under 35 U.S.C. § 103 for obviousness based upon Suzuki in view of Ishikawa. Specifically, the combination of Suzuki in view of Ishikawa fails to teach or suggest the claimed relationship between the color components and the sequential extracting of the representative color. The tertiary reference to Makita also does not disclose this concept. Accordingly, the proposed combination of references would not yield the claimed invention. Applicants, therefore, respectfully submit that the imposed rejection of claims 3 and 18 under 35 U.S.C. § 103 for obviousness based upon Suzuki in view of Ishikawa and Makita is not viable and, hence, solicit withdrawal thereof.

**CLAIMS 4 AND 19 ARE REJECTED UNDER 35 U.S.C. § 103 FOR OBVIOUSNESS BASED
UPON SUZUKI IN VIEW OF ISHIKAWA AND FURTHER IN VIEW OF KOBAYASHI, U.S. PATENT NO.
5,608,851**

On page six of the Office Action, the Examiner concluded that one having ordinary skill in the art would have been motivated to modify the combination of Suzuki and Ishikawa in view of Kobayashi to arrive at the claimed invention. This rejection is respectfully traversed.

Claims 4 and 19 respectively depend upon independent claims 1 and 16, and Applicants incorporate herein the arguments previously advanced in traversing the imposed rejection of claims 1 and 16 under 35 U.S.C. § 103 for obviousness based upon Suzuki in view of Ishikawa. Specifically, the combination of Suzuki in view of Ishikawa fails to teach or suggest the claimed relationship between the color components and the sequential extracting of the representative color. The tertiary reference to Kobayashi also does not disclose this concept. Accordingly, the proposed combination of references would not yield the claimed invention. Applicants, therefore, respectfully submit that the imposed rejection of claims 4 and 19 under 35 U.S.C. § 103 for obviousness based upon Suzuki in view of Ishikawa and Kobayashi is not viable and, hence, solicit withdrawal thereof.

**CLAIMS 5, 7, 20 AND 22 ARE REJECTED UNDER 35 U.S.C. § 103 FOR OBVIOUSNESS
BASED UPON SUZUKI IN VIEW OF ISHIKAWA AND FURTHER IN VIEW OF KIMURA ET AL., U.S.
PATENT NO. 5,487,119 (HEREINAFTER KIMURA)**

On page seven of the Office Action, the Examiner concluded that one having ordinary skill in the art would have been motivated to modify the combination of Suzuki and Ishikawa in view of Kimura to arrive at the claimed invention. This rejection is respectfully traversed.

Claims 5 and 20 respectively depend upon independent claims 1 and 16, and Applicants incorporate herein the arguments previously advanced in traversing the imposed rejection of claims 1 and 16 under 35 U.S.C. § 103 for obviousness based upon Suzuki in view of Ishikawa. Specifically, the combination of Suzuki in view of Ishikawa fails to teach or suggest the claimed relationship between the color components and the sequential extracting of the representative color. The tertiary reference to Kimura also does not disclose this concept. Accordingly, the proposed combination of references would not yield the claimed invention. Applicants, therefore, respectfully submit that the imposed rejection of claims 5 and 20 under 35 U.S.C. § 103 for obviousness based upon Suzuki in view of Ishikawa and Kimura is not viable and, hence, solicit withdrawal thereof.

**CLAIMS 6 AND 21 ARE REJECTED UNDER 35 U.S.C. § 103 FOR OBVIOUSNESS BASED
UPON SUZUKI IN VIEW OF ISHIKAWA AND FURTHER IN VIEW OF YADA, U.S. PATENT NO.
6,285,458**

On page eight of the Office Action, the Examiner concluded that one having ordinary skill in the art would have been motivated to modify the combination of Suzuki and Ishikawa in view of Yada to arrive at the claimed invention. This rejection is respectfully traversed.

Claims 6 and 21 respectively depend upon independent claims 1 and 16, and Applicants incorporate herein the arguments previously advanced in traversing the imposed rejection of claims 1 and 16 under 35 U.S.C. § 103 for obviousness based upon Suzuki in view of Ishikawa. Specifically, the combination of Suzuki in view of Ishikawa fails to teach or suggest the claimed relationship between the color components and the sequential extracting of the representative color. The tertiary reference to Yada also does not disclose this concept. Accordingly, the proposed combination of references would not yield the claimed invention. Applicants, therefore, respectfully submit that the imposed rejection of claims 6 and 21 under 35 U.S.C. § 103 for obviousness based upon Suzuki in view of Ishikawa and Yada is not viable and, hence, solicit withdrawal thereof.

**CLAIMS 9-13, 24-28 AND 31 ARE REJECTED UNDER 35 U.S.C. § 103 FOR OBVIOUSNESS
BASED UPON TAKAICHI ET AL., U.S. PATENT NO. 5,787,192 (HEREINAFTER TAKAICHI), IN VIEW
OF ALLEBACH**

On pages nine through twelve of the Office Action, the Examiner concluded that one having ordinary skill in the art would have been motivated to modify Takaichi in view of Allebach to arrive at the claimed invention. This rejection is respectfully traversed.

On page nine of the Office Action, the Examiner referred to column 1, lines 49-51 of Takaichi to teach certain of the claimed limitation. This passage in Takaichi states that after colors included in each block are classified into colors A and B, the coding is performed for each block regarding a data indicating the color A and the color B and a bitmap for distinguishing the color A and the color B. In the subsequent paragraph, Takaichi teaches that the color reduction processing is described so that the full colors are reduced in 256 colors or 16 colors. Allebach describes that dividing is repeated until the number of cells reaches a desirable number. However, neither Takaichi nor Allebach teaches or describes that the selection of the target color is "according to a comparison between the statistics," as recited in independent claims 1, 16, and 31. Since claims 9-13 and 24-28 respectively depend upon claims 1 and 16, Applicants respectfully solicit withdrawal of the imposed rejection of claims 9-13, 24-28, and 31 under 35 U.S.C. § 103 for obviousness based Takaichi in view of Allebach.

CLAIMS 15 AND 30 ARE REJECTED UNDER 35 U.S.C. § 103 FOR OBVIOUSNESS BASED UPON SUZUKI IN VIEW OF ISHIKAWA AND FURTHER IN VIEW OF ALLEBACH AND MAKITA

On page fourteen of the Office Action, the Examiner concluded that one having ordinary skill in the art would have been motivated to modify the combination of Suzuki and Ishikawa in view of Allebach and Makita to arrive at the claimed invention. This rejection is respectfully traversed.

Claims 15 and 30 respectively depend upon independent claims 1 and 16, and Applicants incorporate herein the arguments previously advanced in traversing the imposed rejection of claims 1 and 16 under 35 U.S.C. § 103 for obviousness based upon Suzuki in view of Ishikawa. Specifically, the combination of Suzuki in view of Ishikawa fails to teach or suggest the claimed relationship between the color components and the sequential extracting of the representative color. The additional references to Allebach and Makita also do not disclose this concept. Accordingly, the proposed combination of references would not yield the claimed invention. Applicants, therefore, respectfully submit that the imposed rejection of claims 15 and 30 under 35 U.S.C. § 103 for obviousness based upon Suzuki in view of Ishikawa, Allebach, and Ishikawa is not viable and, hence, solicit withdrawal thereof.

Applicants have made every effort to present claims which distinguish over the prior art, and it is believed that all claims are in condition for allowance. However, Applicants invite the Examiner to call the undersigned if it is believed that a telephonic interview would expedite the prosecution of the application to an allowance. Accordingly, and in view of the foregoing

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remarks, Applicants hereby respectfully request reconsideration and prompt allowance of the pending claims.

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417, and please credit any excess fees to such deposit account.

Respectfully submitted,

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A handwritten signature in black ink, appearing to read 'SDP', is written over the printed name of Scott D. Paul.

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